

AMENDMENTS TO THE SPECIFICATION

The abstract is amended as follows:

ABSTRACT OF THE DISCLOSURE

[0054] A packet-network analyzer system for characterizing network conditions of a packet-network-under-test is provided. In this regard, one such system can be broadly summarized by a representative analyzer system that incorporates a data collection element to receive the raw digital data from a host analyzer, a data selection element to receive the raw digital data, a data processing element to process the selected data set to generate a normalized data set, a neural processing module to process the normalized data set to generate a set of rules and relationships, and a data mining module that uses the rules and relationships to generate a mined data set from the selected data set, the mined data set being used to characterize a packet-network-under test.

[0055] Another embodiment can be described as a method for analyzing a packet-network-under-test, comprising the steps of receiving raw digital data that is derived from a packet-network-under test; generating a selected data set from the raw digital data; generating a normalized data set from the selected data set; processing the normalized data set in a neural network to generate a set of rules and relationships; using the set of rules and relationships for mining the selected data set to generate a mined data set; and using the mined data set to characterize the packet-network-under test.